National Institute of Environmental Health Sciences

Association between dust weather and number of admissions for patients with respiratory diseases in spring in Lanzhou

Author(s): Tao Y, An X, Sun Z, Hou Q, Wang Y
Year: 2012
Journal: The Science of The Total Environment. 423: 11-Aug

Abstract:

Controlling the confounding factors on respiratory hospitalizations such as long-term trend, meteorological factor, atmospheric pollution, and calendar effect, the research is designed to study the effect of sand-dust weather on respiratory diseases from 2001 to 2005 in Lanzhou City on the basis of the semi-parametric generalized additive model (GAM). The results indicate that there is an association between sand-dust weather and the increase in respiratory hospitalizations, and with lagging effect. There are gender and age differences in the effect of sand-dust weather on health, on male severer than on female (RR value being 1.148 for male, while 1.144 for female without statistical significance), and much greater on the aged ≥ 65 years than on < 65 years (RR value being 1.266 for ≥ 65 yr, and 1.119 for < 65 yr).

Source: http://dx.doi.org/10.1016/j.scitotenv.2012.01.064

Resource Description

Exposure :

weather or climate related pathway by which climate change affects health

Air Pollution

Air Pollution: Dust, Particulate Matter, Other Air Pollution

Air Pollution (other): SO2, NO2

Geographic Feature:

resource focuses on specific type of geography

Valley

Geographic Location:

resource focuses on specific location

Non-United States

Non-United States: Asia

Asian Region/Country: China

Health Impact:

specification of health effect or disease related to climate change exposure

Respiratory Effect

Respiratory Effect: Other Respiratory Effect

Respiratory Condition (other) : respiratory hospitalization

Population of Concern: A focus of content

Population of Concern:

populations at particular risk or vulnerability to climate change impacts

Elderly

Resource Type:

format or standard characteristic of resource

Research Article

Timescale:

time period studied

Time Scale Unspecified